Information Systems Security Line of Business (ISS LoB)

Information Security and Privacy Advisory Board

George Washington University

Washington, DC

March 22, 2007

Agenda

- Background
- Status
- Next Steps

Background Lines of Business

LoBs initiated in FY2004:

- Financial Management (FM)
- Human Resources Management (HR)
- Grants Management (GM)
- Federal Health Architecture (FHA)
- Case Management (CM)

These LoBs have progressed:

- Common processes defined
- Shared Service Centers established
 Due diligence validation in FM,HR

Common Solution: A business process and/or technology based shared service made available to government agencies.

Business Driven (vs. Technology Driven): Solutions address distinct business improvements that directly impact LoB performance goals.

Developed Through Architectural
Processes: Solutions are
developed through a set of
common and repeatable
processes and tools.

Goals of ISS LoB

- Support performance of the Federal government's mission through improved information systems security
- <u>Establish a mechanism</u> to acquire, distribute and support information security solutions
- <u>Leverage</u> existing workforce <u>resources</u> capable of leading the confidentiality, integrity and availability of federal information and information systems and attract and retain supplemental workforce resources to this end

Problem Statements

- Security Training:
- Lack of common ISS career path
- Federal-wide standards for ISS skills have not been defined
- Lack of common criterion for credentialing ISS professionals
- Agencies are individually developing and procuring baseline content and sustaining distinct infrastructure to support ISS
- FISMA reporting:
- Disparate and manual FISMA reporting processes within agencies tends to lead to inconsistent FISMA reporting to oversight organizations, and inadequate program management
- Gaps reflect lack of a cohesive government-wide approach to information security as well as the redundancy of existing information security processes
- Situational Awareness & Incident Response:
- Uniform and comprehensive approach lacking within the federal government
- Agencies lack the knowledge, skills, and abilities to identify the vulnerabilities within their IT infrastructure and the risk to their information resources
- Many agencies do not have technical or financial resources to mitigate these risks
- <u>Lifecycle/Security Solutions:</u>
- Lack of common mandatory methodology for lifecycle and security solutions and services
- Unnecessary demarcation of baseline requirements with respect to security solution selection for national security systems/information versus non-national security systems/information
- Lack of awareness of existing standards and/or guidance across the federal government for selection evaluation, testing, and acquisition of security solutions

What the ISS LOB does not do

- Transfer accountability for agencies to meet all FISMA requirements and ensure an effective and efficient information systems security program
- ➤ Eliminate agency/program decision-making to integrate security products and services within the fabric of the agency's information security program
- Transfer resources for acquiring products and services to the SSCs except in those instances where agencies have agreed
- Intend that "one solution fits all" for agency security requirements

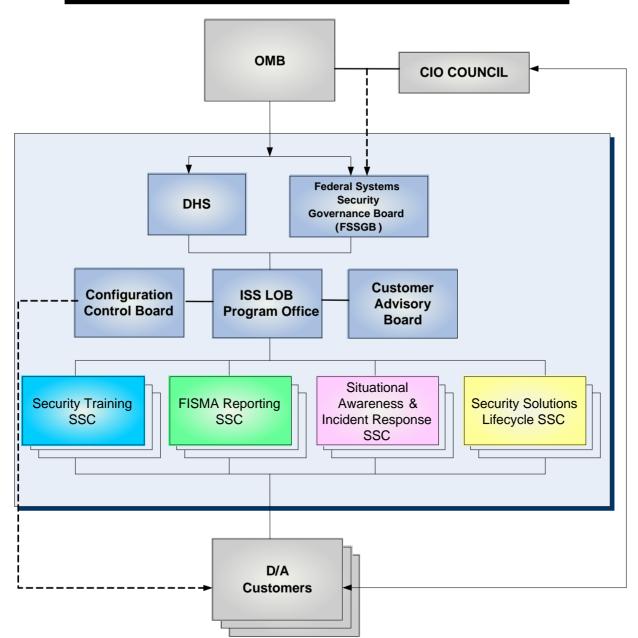
Overall Task Force Recommendations

- Common Solutions in the following 4 areas:
 - Training
 - FISMA Reporting
 - Situational Awareness and Incident Response
 - Emerging Security Solutions for the Lifecycle
- Common Solutions close security gaps by establishing Share Service Centers (SSC) that:
 - drive better performance
 - increase expertise through specialization
 - reduction in cost by providing products and services common to civilian agencies, intelligence community, and DOD
- Governance Structure
- Phased Implementation

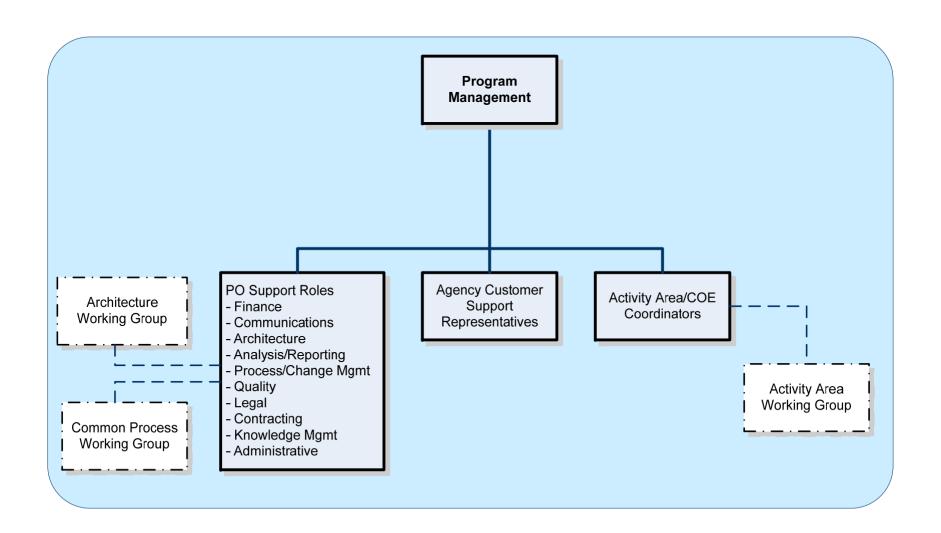
Governance Structure

- Federal Systems Security Governance Board (FSSGB) a multi-agency, multi-function oversight body and steering committee for the Information Systems Security Line of Business.
- Program Management Office (PMO) established to facilitate the day-to-day operations of the ISS Line of Business based on guidance from the Board.
- Shared Service Centers (SSCs) provide security products and services that are used by Customer agencies.
- Federal Agencies and Departments (Customers) leverage common solutions provided by the SSCs to support their security requirements.

Governance Structure



Program Management Office



High Level Implementation Schedule

COE/Tier Phasing for ISS LOB (P = Plan/Manage, I=Implement/Acquire, Rm=Rollout Mandatory Tier, Ro=Rollout Optional Tier)																	
		Timeframe															
		FY06		FY07		FY08		FY09		FY10		FY11		FY12		FY13	
Area	Specific Solutions/Activities	1H	2H	1H	2H	1H	2H	1H	2H	1H	2H	1H	2H	1H	2H	1H	2H
FSSGB/PO	Plan/Manage ISS LOB	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	р	р			
Training COEs	Tier 1 - User Awareness Training		Р	Τ	Rm	Rm	Rm										
	Tier 2 - Specialized Training (Optional)		Р		T	R٥	Ro	R٥	R٥	R٥	R٥						
FISMA COEs	FISMA Reporting (Mandatory)		Р	Т	Rm	Rm	Rm	Rm	Rm	Rm							
SAIR COEs	Tier I – Core SAIR (Mandatory)		Р	Т	Т	Rm	Rm	Rm	Rm	Rm	Rm						
	Tier II – Enhanced SAIR (Optional)			Р	Р	Τ	T	R٥	Ro	R٥	Rο	R٥	Ro				
	Tier III - Advanced SAIR (Optional)					Р	Р	1	1	Ro	Ro	R٥	Ro	R٥	Ro		
Security Solutions/ Life Cycle COEs	Tier I - Lifecycle (Mandatory)		Р	Р	T	1	Rm	Rm	Rm	Rm	Rm	Rm					
	Tier 2 - Advanced Lifecycle (Optional)			Р	Р	T	T	R٥	R٥	R٥	R٥	R٥	R٥				

(Once Planing/Management has begun for a COE, it continues throughout the life of the investment. Maintenance begins the year after implementation for a COE is completed.)

Security Training

Solution

- Common suites of ISS training products and training services for the Federal Government, to include government-wide licenses for commercial IT applications and security training products
 - User Awareness
 - Specialized Training

Anticipated Outcomes

- Development of federal ISS skills standards & competencies to better align nationally recognized credentials to government ISS roles
- Infusion of ISS content into senior executive development & education programs
- Development of a repository of government sponsored/approved COTS training products and sources

FISMA Reporting

Solution

 Provide agencies with shared products & services to comply with FISMA reporting requirements - using pre-existing standardized tools for this process

Anticipated Outcomes

- Government-wide process that can produce standardized FISMA results to OMB and lower FISMA processing costs
- Steady progress in terms of improving security maturity
- Automation allows for more efficient completion of the required annual security assessments and reporting, making it easy to keep information current to be used for program management - managers would also be in a better position to respond to ad hoc queries
- Improved program management capabilities would result in higher levels of compliance with performance standards - managers at all levels would be able to stay better informed and assure proper and timely action
- Efficiencies gained through use of central, standardized tools

Situational Awareness & Incident Response

Solution

- Multiple SSCs provide shared products and services for specific functional areas
- Provide federal enterprise situational awareness and incident response capability
- Start with functions providing a critical foundation for ISS, identifying others in future as Line of Business evolves

Anticipated Outcomes

- Complements existing US-CERT/CIRT programs.
- Affordable alternative for smaller agencies to be served by larger agency to assist with information security without the huge cost to maintain the capability locally
- More uniform service approach, as the work will be mapped to a standard method for conducting the activity improving the consistency across government
- Aggregate requirements for tools and services, offering a choice of solutions to meet specific needs or proven practices
- Learn about experiences of other agencies with a particular product or service prior to making purchasing decisions
- Develop collection of common tools and practices that meet established standards, bringing consistency to the information systems security posture

Emerging Security Solutions for the Lifecycle

Solution

- Define a standardized process to guide agency personnel in selecting the appropriate security product or service.
- Establish a repository containing:
 - Information on specific COTS/GOTS security solutions
 - Administrative procedures to be used by all agencies (to include risk management methodologies, cost benefit analyses, acquisition language, security planning tools)

Anticipated Outcomes

 Standardized methodology will provide for interoperability of security solutions and services, repeatable implementation of product selection, providing non-repudiated means to ensure contractors and outsourcing providers follow the governments' mandatory baselines

SSC Responsibilities

Establish SSC

- Develop and execute detailed architecture and implementation plan for standing up SSC (SSC operational costs)
- Negotiate and acquire needed partnerships, tools, or other capabilities
- Implement/deliver Common Solutions
- Establish processes for operation/management of the SSCs
- Establish processes for communication, education and reporting to stakeholders; SSC Agency, ISS LOB, customers, other
- Develop and establish marketing materials and plan for signing up customer agencies
- Establish tracking and reporting process

Considerations for Migrating Agencies

- Migrate over time to use of SSCs.
- Key considerations:
 - Service/products to migrate and associated migration schedules
 - Impacts to end users, management, business processes, and existing contractual obligations
 - Impacts to IT infrastructure (e.g., capacity, technology, communications, security and access controls, and help desk)
 - Data migration
 - Personnel transition
 - Asset disposition
 - Continuity of Operations
 - Change management
 - People
 - Process
 - Technology

Customer Agencies Responsibilities

Customer D/A SSC Selection and Migration

- Define agency requirements for the security area (What does the agency need?)
- Determine strategy for meeting requirements, e.g., migrate to SSC, adopt an agency, waiver to support internally, and migration timeframe SSL,
- Identify SSC exit or change strategy
- Develop and submit business case for strategy
- Develop Customer Agency criteria for selecting a SSC
- Evaluate and select SSC to provide common services for the Security Area
- Coordinate and execute IAA & SLA with SSC
- Migrate agency to SSC according to time period
- Perform change management to support the migration

Next Steps

- ➤ Coordinate SSC implementation/activities
- Coordinate/establish MOUs with SSCs
- > Establish action plans for work groups
- ➤ Establish Security Solutions Work Groups
- ➤ Continue coordinate with FM/HR/IOI LOBs

Questions

Michael C. Smith Department of Homeland Security National Cyber Security Division mike.c.smith@dhs.gov